

**SANITARY PROGRESS IN THE PROVINCES.**—At Chelmsford "a vast number of really dangerous nuisances and annoyances have been removed." The Board of Health too have appointed an inspection. — At Leicester the propriety of adopting the Health Act is to be discussed by the council, and the removal of nuisances, in the meantime, is being attended to. There appear to be difficulties in the disposal of manure to contend with. — At Penrith one party is determined on adopting the Health Act, another thinks the Nuisances Act sufficient. — Witham has applied for the Health Act, and a commissioner is to make inquiries. — The Newmarket guardians warn parish surveyors, that though the general Highway Act only empowers them to scour ditches, gutters, drains, or water-courses, the Health Act requires them to do so under a penalty of 5*l.* for neglect. Other salutary hints are being given to proprietors of nuisances, &c. —

The Nuisances Act is being put into active operation at St. Ives, Leominster, Sculcoates (Hull), Kington (Hereford), Upperby (Carlisle district), and even in "primitive old Hinckley;" yea, even at "Crook," according to a correspondent of the *Gateshead Observer*, embued with the cleansing spirit of the age, a committee on "sanitary nuisances" has been appointed. — Stratford has just formed a sanitary committee; and the West Ham Union are in correspondence with the Board of Health. — The *Gazette* has published further cleansing regulations as to Scotland; and at Edinburgh the Police Commission and the Royal Colleges of Physicians and Surgeons are confabulating, while the Town Council and the Board of Health have also a mutual good understanding as to sanitary measures.

**CLAIMS ON CONTRACT-WORKS.**—The arbitrator in the case "*Burgess v. Brassey and Mackenzie*," is said to have established Mr. Burgess's various claims, with some trifling deductions, and awarded the whole costs to be paid by the defendants, whose counter claims, turning the balance of account in their favour to 68*2l.* odd, were disallowed. One of Mr. Burgess's chief claims was for a share of a premium of 50,000*l.*, paid by the Caledonian Company to Messrs. Brassey and Mackenzie for opening their line six months before the time limited in the original contract! Another claim allowed was for the profits reaped by Messrs. Brassey and Mackenzie on a lighter portion of the contract let to Mr. Burgess, but which it was alleged the defendants, notwithstanding, relet to another contractor at lower prices, on account of the lighter work upon it. A third claim was for "diminution of labour and damages sustained by night-work, owing to being kept out of possession of the work eight months after the work was taken;" this claim also included a rise of 25 per cent. upon labour and provisions, 30 per cent. upon horses' hay and oats during the detention, &c. A fourth was for six miles of excavation at 9*d.* per cubic yard. These and others, in all amounted to a sum of 1,140*l.* and upwards. One of the claims made by the defendants, but disallowed by the arbitrator, was for 96*2l.* odd, for trimming off and soiling the plaintiff's work during the time when they themselves had prevented him from finishing his contract.

**WHY LIONS SPOUT WATER IN FOUNTAINS.**—Anubis, or Sirius, the dog-star, was worshipped by the Egyptians from its supposed influence on the rising of the Nile. According to Champollion, their calendar commenced when the heliacal rising of that star coincided with the summer solstice, the time at which the Nile began to swell at Cairo. Now, this coincidence made the nearest approach to accuracy 3,291 years before the Christian era; and as the rising of the river still takes place precisely at the same time and in the same manner, it follows that the heat and periodical rains in Upper Ethiopia have not varied for 3,000 years. In the time of Hipparchus, the summer solstice was in the sign of Leo; and probably about that period the flowing of the fountains from the mouths of lions of basalt and granite was adopted as emblematic of the pouring forth of the floods of the Nile. The emblem is still common in Rome, though its origin is probably forgotten, and the signs of the Zodiac have moved backwards more than thirty degrees. — *Physical Geography*, by Mary Somerville.

**PROJECTED WORKS.**—Advertisements have been issued for tenders—by 9th December for the supply of English oak, timber, mahogany, &c., for the London, Brighton, and South Coast Railway Company; by 6th, for the completion of two contracts on the London and North-Western Railway; by 25th inst., for the whole or any portion of the works required in erecting a new church at Clayton, Bradford; by 13th December, for building a chancel and vestries to St. Catherine's Church, Ventnor, Isle of Wight; by 5th, for making three sewers at Cambridge (separate contracts); and by 11th, for the construction of a reservoir and tank, &c., a supply of iron pipes, slide cocks, fire plugs, &c., and for the construction of a system of sewerage, all for the town improvement of Londonderry.

A TOWN SURVEYOR is wanted by the Corporation of Derry, borough of Londonderry: salary, 150*l.* per annum.

**A ROLLING FENCE IN THE NEW FOREST.**—The *Hampshire Advertiser* says:—"Among the discoveries made by the new management of the forest, but well known within and without its borders, and which is to be specially provided against for the future, is the rolling fence. Gilpin, in his *Forest Scenery*, describes the manoeuvre as that of taking in the ditch one year and putting another outside the hedge the next. That practice was stopped, and the present mode adopted. The cuttings of the hedge are thrown over, and accidentally strike. The hedge becomes too thick, and is thinned—of course on the inside. In fact, the old hedge is taken away. In due time the process is repeated, technically called a 'rolling fence,' and the inclosure insensibly expands."

**THE GREAT TUBULAR BRIDGES.**—The final operation of lowering the second tube bridge at Conway for the return line to London, on the Chester and Holyhead Railway, and the placing it on its permanent bed, was accomplished on Wednesday. The ponderous mass of 1,300 tons was suspended on chains, hanging and swinging two feet above its permanent bed, over an area of estuary of 400 feet, and 20 feet above the Straits, for a period of ten days, during which the engineers and pilots were engaged in adjusting the bed plates and rollers and masonry for its support. The tube was likewise lengthened 12 feet, by the addition of 6 feet of similar tube to each end of the mass so raised, this additional length alone weighing upwards of 60 tons. The whole bridge, with its permanent way for the passage of the trains, complete and ready for use, was then gradually lowered by means of the hydraulic presses which raised it, on to a bed of red and white lead, spread over the creosoted timber, which equalised the weight on the cast-iron bed plates and rollers, to allow for the constantly varying length of the tube from changes of temperature. The tube is now in use for the transit of the trains. — *Morning Herald*.

**RELATIVE HEIGHTS OF MAPS.**—Sir: On examining lately a plan of a rather large estate, prepared by a land surveyor, for the use of competing architects, in devising schemes for laying out the grounds for building, I was glad to find that the usual practice of giving, separately, sundry lines of section, which sometimes bear very little relation to each other, had not been followed; but that heights from a given datum level (the lowest) were marked in figures on the map instead. Unfortunately, however, it turned out on closer inspection, that while in some parts these figured heights were unnecessarily plentiful, in many others they were few and far between; and it occurred to me that it would be carrying out this better mode in the best manner, if the surveyor, in such cases, would give the heights in a systematic order,—dividing, for example, the whole plan into equal squares, and marking the heights at the intersections,—the squares measuring a yard, ten feet, or any other dimension, according to convenience, or the necessity of the case. It is obvious that where the surveyor must be totally unaware of the thousand and one modes of arrangement which may be proposed in a widely-advertised competition, the system of relative heights which he gives, should be such as will apply equally well to all, and subserve for determining the extent of cutting and banking which may be requisite in forming the lines of road in the plan ultimately adopted. J. W.

**ARCHÆOLOGY.**—The Bishop of Oxford has declared himself a warm supporter of architectural and archæological associations, and has recently accepted the office of president of a society formed in Bucks. His lordship, however, has cautioned his brother members against some of the dangers attendant on too zealous a pursuit of antiquarian researches. "The master danger," says the Bishop, "from which all others spring, is this—lest the lover of antiquity should be tempted rather to seek to go back into that old time than to let its curious lights cast their beams upon the present—lest he should forget that the life only of that old time was what gave it worth, and that his object should be to strengthen the life of this present time—lest, whilst gazing affectionately upon the outward trappings of circumstance (which is of moment only as it witnesses of life within) he should grow to value for themselves those outward things, and seek to reproduce them upon this living world."

**EXTRAORDINARY BLOCK OF GRANITE.**—A block of granite, containing upwards of 12,000 cubic feet of stone, and exceeding in weight 850 tons, was dislodged on Tuesday, at the granite quarries of Messrs. Freeman and Co., at Maen. A hole 9 feet deep having been bored, 1½ lb. of powder, with which it was charged, produced a slight crack; into this was thrown another charge of 35 lbs., which, on explosion, threw out this immense block several yards from its bed. Considering the largeness of some of the stones produced at these quarries, it is astonishing in how comparatively short a time they are prepared for exportation. A few days since another large rock was unseated, measuring when wrought 150 feet, and in weight 11 tons, the preparing and working of which was performed by a couple of men in a week. The removal of this stone from the quarry attracted the attendance of a great number of visitors, whose remembrance of the difficulties experienced a few years ago in the transit of such stones contrasted strangely with the ease and expedition of the present day—not the slightest let or hindrance occurring from the loading to its deposit on the quay. The stone at these quarries is of admirable quality, and of very great extent, the present slope being 50 feet, and as it proceeds a much greater depth will be attained. — *Cornwall Gazette*.

**RAILWAY COMPENSATION CASE.**—POP-LEWELL AND OTHERS v. THE LEEDS AND BRADFORD RAILWAY COMPANY.—Tuesday last a sheriff's jury was impanelled at the Odd Fellows' Hall, Shipley, to assess the amount of compensation to be given to those claimants who are devisees of the mortgage estates of the late Mr. John Sharp, of Bingley, for damages, in consequence of a worsted mill at Bingley, now occupied by Mr. David Wilkinson Sharp, having been injuriously affected by the company's works. Mr. Russell Gurney, Q. C., and Mr. Addison appeared for the claimants; and Mr. Stephen Temple for the railway company. The amount demanded of the Company in the notice of claim was 7,220*l.* It appeared from Mr. Gurney's opening, that the company, in raising the ground at their station at Bingley, had placed their embankment upon a field of boggy earth in front of Mr. Sharp's mill, whereby the light of the lower floor was seriously injured, and a great amount of damp forced from underneath, below the foundation of the mill, which rendered the floor unfit to stand upon, and injured the walls and the machinery. In his opening, Mr. Gurney reduced the claim to 1,500*l.* About 28 witnesses were examined for the claimants, and their evidence went to show damages varying in amount from 1,570*l.* to 1,900*l.* The company altogether denied that any extra damp had been caused by their works, or that the light was materially injured, the embankment in front of the weaving-room being less than two feet in height, and at a distance of 30 feet from the mill. The inquiry closed on Thursday night, when, after an hour's absence, the jury gave a verdict for 100*l.* It subsequently transpired that six of their number were of opinion that no damage whatever had been sustained; and the other six considered that the light had been to some extent affected. The result of their deliberations, however, was a verdict for the above amount. — *Leeds Mercury*.